

allogeneic or autologous BMT at Sydney Children's Hospital, Australia between February 2002 and December 2004.

Results: 20% of the patients were at risk of malnutrition on admission. All patients received parenteral nutrition (PN) as their standard nutritional therapy, which was commenced on a mean of day +1 and was infused for an average of 26 days. Our patients received an average of $79\% \pm 10.6(40-100\%)$ of estimated energy requirements from PN. The glucose/amino acid infusion was inadequate on 40% of PN days with the main reason due to fluid overload causing a reduction in infusion rates. The lipid infusion was inadequate on 60% of PN days mainly due to stoppages when drugs and/or blood products were infused. The mean percentage weight change on discharge was $+0.3 \pm 4.7\%$. This had a large range of between -9.9% to $+7.9\%$ of body weight and did not appear to relate to adequacy of parenteral nutrition during transplant. We found that those patients who had weight loss on discharge had greater number of days off PN prior to discharge than those with no weight loss. Those patients who received enteral nutrition (21%) prior to discharge had no weight loss on discharge.

Conclusion: This study showed that although frequent rate reductions in nutrition infusions did occur due to fluid overload or drug incompatibility with PN, patients still received the majority of their nutritional requirements. Weight loss on discharge from transplant may be more indicative of the adequacy of oral/enteral nutrition prior to discharge rather than the adequacy of the nutrition support during the transplant. Long-term consequences of inadequate nutrition during a BMT as well as nutritional issues post BMT requires further study.

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H1N1 INFECTION IN STEM CELL TRANSPLANT PATIENTS

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Influenza A virus can be a significant cause of morbidity and mortality in the general population as well as in immunocompromised patients.

We present instances where stem cell transplant patients developed H1N1 infection with encouraging outcomes.

Case 1: A 26 year old male with history of relapsed Hodgkin's disease status post autologous peripheral blood stem cell transplant in December 2008, presented with fever and cough six months after transplantation. His chest X-ray revealed consolidation and CT scan of the chest showed ground glass opacities throughout the lungs. The patient was started on intravenous antibiotics and a respiratory panel was sent. The panel was positive for non-typeable influenza A, indicative of H1N1 infection. The antibiotics were stopped and Oseltamavir was initiated. After 5 days of treatment, the patient's symptoms resolved, and his repeat CT scan showed marked resolution of the ground glass opacities.

Case 2: A 64 year old male patient with history of relapsed, transformed low grade lymphoma, status post unrelated reduced intensity allogeneic bone marrow transplantation in December 2008, complicated by GVHD, presented in May 2009, with new onset throat discomfort, cough and fever. A respiratory panel was positive for non-typeable influenza A and CT scan of the chest revealed bilateral lung consolidation. The patient was started on Oseltamavir, with complete resolution of symptoms and improved CT findings.

Discussion: In March 2009, the pandemic caused by H1N1 influenza claimed thousands of lives. This strain of virus represents a quadruple reassortment of two swine strains, one human strain and one avian strain.

Although real time PCR is the most sensitive and specific test for the diagnosis of H1N1, recent CDC guidelines, do not recommend this test for every presumed case of H1N1 infection. During the spring of 2009, a diagnosis of H1N1 infection could be made, if a patient presented with signs and symptoms of upper or lower respiratory tract involvement and if influenza A was identified on a respiratory panel. Our patients were diagnosed with H1N1 infection and with the use of Oseltamavir, had complete response and resolution of symptoms with minimal morbidity.

Thus we conclude that H1N1 infection may not be associated with significant morbidity and mortality in stem cell transplant patients if a timely diagnosis is made and treatment is initiated.

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RED CELL CONTENT IN PERIPHERAL HEMATOPOIETIC PROGENITOR CELL (HPCA) COLLECTIONS FOR TRANSPLANT IN PEDIATRIC PATIENTS. COMPARISON TO ADULT MATCHED UNRELATED (URD) PERIPHERAL BLOOD COLLECTIONS. TO DETERMINE THE MAXIMUM ACCEPTABLE VOLUME OF RED CELLS FOR INFUSION

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We assessed the amount of red cells in peripheral blood collections from pediatric patients and compare them to adult URD collections.

Twelve pediatric HPCA collections (5 allo and 7 auto) using the BCT Spectra at Children's Memorial Hospital were compared to 18 URD collections from multiple institutions received at Northwestern Memorial Hospital Cellular Processing Facility (CTPF) from January to July 2009. Column statistics and t test were performed on Prism software.

The median total product volume collected per harvest of the URD was 293 ml (range 166-447) mean 299 SEM +18 (95% CI 261-337) The median total product volume collected from pediatric donors was 133 (range 16-299) mean 138 SEM +29 (95% CI 75-202) $p < 0.0001$. The median Hct per collection of the URD was 6.5% (range 3-17) mean 7.6 SEM +0.8 (95% CI 5.8-9.3) and from the pediatric collections, the median Hct was 9.5% (range 4.0-19) mean 9.6 SEM +1.4 (95% CI 6.3-2.7) $p = 0.99$. The median red cell volume per collection for the URDs was 24 ml (range 9-46) mean 23 SEM +2.3 (95% CI 18-28) while for the pediatric donors, the median was 8.5 ml (range 4-36) mean 12 SEM +2.4 (95% CI 6.1-17.0) $p = 0.003$.

The Hct in URD vs. pediatric collections was not statistically significantly different. Since the red cell content is dependent on the total product volume, the red cell volume was greater in the URD collections. HPCA infusions.

CRA – DATA MANAGEMENT

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CLINICAL IMPACT OF STOMATITIS SEVERE IN PATIENTS RECEIVING MYELOBLATIVE, NON MYELOBLATIVE AND REDUCED INTENSITY CONDITIONING REGIMENS AND HAEMATOPOIETIC PROGENITOR TRANSPLANTATION: EXPERIENCE OF SINGLE CENTER

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Introduction: Stomatitis severe is the mayor limiting dose by preparative regimen in stem cell transplantation reporting percentages that vary widely (0% to 100%) associated with intensity chemotherapy but these percentages not are real (0% with minimal intensity and 100% with myeloablative regimen) and this represent the goal of this study additional to analyze their clinical impact on another complications in transplantation field.

Patients and Methods: Observational and transversal study was made in patients receiving stem cell transplantation since November 2002 to September 2009 in ABC Medical Center Mexico City. All were older 1 year (female or male). The preparative regimen were separated into myeloablative, non myeloablative (or moderate-intensity) and minimal-intensity in relation with CIBMTR criteria. The presence of erythema, edema, pain, sore throat and ulcerations mouth after chemotherapy was defined stomatitis and their severity was graduated with NCTC v3.0 scale (Stomatitis grade 3 y 4 was defined severe).

Results: 52 patients with medium age 29 years old (range 2-72). Predominance male (56.6%; ratio M:F 1.4:1). 21 patients received myeloablative regimen (40.5%), 19 non myeloablative (36.5%) y 12 minimal-intensity (23%). 23 patients presented stomatitis severe (44.23%) predominance in myeloablative regimens (56.52% vs 30.4% non myeloablative y 13% minimal intensity) and allogeneic transplantation (60.86%). 65.2% of cases with stomatitis grade 3 required opiates infusion and 100% total parenteral nutrition (independently preparative regimen). The febrile